

GP-303019

DECOUPLING A HARMONIC SIGNAL FROM A SIGNAL PATH

ABSTRACT OF THE DISCLOSURE

A method for decoupling a harmonic signal from an input signal wherein the harmonic signal is harmonic relative to a signal other than the input signal. An angular position of the other signal is multiplied by a value representing the harmonic to obtain an angular position multiple. A harmonic decoupling block uses the angular position multiple to obtain correction signals representing the harmonic signal, and subtracts the correction signals from the input current to decouple the harmonic signal from the input signal. This method is useful for decoupling unwanted harmonics from currents into which high-frequency signals have been injected for control of electric motors.